

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of
the New Penn Mines, Inc., to
Review the California Regional
Water Quality Control Board,
Central Valley Region, Order
No. 72-57

Order No. 72-15

On December 16, 1971, New Penn Mines, Inc., petitioned the State Water Resources Control Board to review Order No. 72-57 of the California Regional Water Quality Control Board, Central Valley Region, adopted September 24, 1971, prescribing waste discharge requirements for the New Penn Mines, Inc., in Calaveras County.

A. The State Board, having considered the petition and the records of the regional board which concern the petitioner's contentions, finds:

1. The New Penn Mine is a nonoperating copper mine located near the head of Camanche Reservoir on the Mokelumne River, Calaveras County (Figure 1).
2. Drainage and runoff waters from the mine property come from exposed mineralized rock surfaces from mine and mill tailings areas, and from at least one underground adit.
3. The drainage wastewater enters Mine Run Creek, Hinkley Creek, and Oregon Creek. Water quality data collected to date indicate that Hinkley and Oregon creeks enter the Penn

Mine property in excellent condition, and become highly acidic, discolored and toxic due to mineral contributions from the abandoned mine area. Data also show the Mine Run Creek which originates on mine property is highly mineralized.

4. Runoff waters traced to the mine area have been the source of copper, zinc, iron, and certain other chemical constituents found in the Mokelumne River downstream of the mine and in Camanche Reservoir where the streams and mine drainage waters enter the lake.

5. Camanche Reservoir and its waters are used for stream-flow regulation, irrigation, flood control, fishing and fish propagation, recreation and domestic supply. A large state salmon and steelhead hatchery is operated with water obtained from Lake Camanche.

6. Waste discharge requirements for New Penn Mine property and New Penn Mines, Inc., were adopted by the Central Valley Regional Water Quality Control Board in Order No. 72-57 on September 24, 1971. Monitoring Program No. 72-90 was specified by the executive officer on September 24, 1971. The requirements and monitoring program were not transmitted to the discharger until November 9, 1971.

7. The waste discharge requirements specify that there shall be no pollution or nuisance caused by the discharge and set the following numerical limits on constituent concentrations in Hinkley or Mine Run creeks: Settleable solids, 0.2 mg/l; suspended solids, 50 mg/l; copper 0.05 mg/l; zinc, 0.1 mg/l; aluminum, 0.2 mg/l;

Fe, 0.2 mg/l. The requirements provide that the discharge shall not have a pH less than 6.5 or greater than 8.5 and that the discharges shall not cause discoloration of the waters of Camanche Reservoir. The requirements also specify that "the discharges shall not cause the survival of test fishes in 96-hour bioassays of the undiluted waters of Hinkley or Mine Run creeks to fall below '70 percent minimum' in 'any determination' and '90 percent minimum' in the 'median of any three or more determinations'."

8. New Penn Mines, Inc. filed a petition with the State Board on December 8, 1971, for review of Order No. 72-57 and Monitoring Program No. 72-90. The petitioner contends the regional board acted unreasonably and exceeded statutory authority in adopting the waste discharge requirements and in specifying the monitoring program.

B. The specific contentions of the petition and the Board's findings concerning them are as follows:

- (1) Contention: "The discharge requirements in Order No. 72-57 are impossible to achieve, unreasonable, arbitrary, capricious, and beyond the authority of the regional board to require and so are the monitoring requirements set forth under 'Provisions' and Monitoring Program No. 72-90."

Findings: The authority of the regional board to prescribe waste discharge requirements is contained in Division 7 of the California Water Code. The boards are empowered to investigate and regulate waste discharges which may affect

the waters of the State. The authority to establish a monitoring program with respect to any waste discharge is also contained in this division.

The waste discharge requirements in Order No. 72-57 were designed to regulate the constituents in the waste from the abandoned mine area which degrade the waters and result in acute or chronic toxic effects to fish and aquatic life downstream. Technology is currently available to meet the standards set forth in Order No. 72-57. Engineering surveys conducted in 1959 indicate that a permanent physical solution is possible through construction of facilities to divert surface waters around the area and prevent mine drainage from entering the streams.

Acute or chronic toxic effects in fish in the receiving waters or at the salmon and steelhead hatchery which derives its water supply from Camanche Reservoir will be controlled by these requirements. The importance of pH control to a fishery and the toxicity of copper, zinc, iron, and aluminum to fish are well documented. Salmonids, of which trout and salmon are examples, are especially susceptible to harm from heavy metals and adverse pH. The following table compares the discharge requirements of Order No. 72-57 with threshold concentrations of heavy metals and hydrogen ion and with the quality of the waste discharge.

Constituents	Adopted Requirements mg/l	Reported Threshold Concentrations* mg/l	Drainage Conc.** mg/l
Copper	0.05	0.02	12 - 385
Zinc	0.1	0.01 - 1.0	16 - 2,590
Aluminum	0.2	0.07 - 0.5	25 - 13,000
Iron	0.2	0.2 - 10	12 - 3,377
pH	6.5 - 8.5	5.0 - 6.0	2.2 - 3.2

Bioassay waste discharge requirements provide the means whereby the effect of a waste discharge on fish and aquatic life may be directly judged. Such requirements are necessary to the effective regulation of discharges of complex wastes with numerous components that may interact to produce varying toxicity and other adverse effects. Bioassay discharge requirements also provide for control of unknown waste components which may produce unexpected toxic effects on fish and aquatic life.

Suspended and settleable solids in waste discharges to streams and impoundments must be controlled to prevent turbidity, siltation, and biostimulation and the resulting adverse effects on the aesthetics of receiving water and its use as an aquatic habitat.

Because of the foregoing reasons the waste discharge requirements contained in Order No. 72-57 are reasonable, capable of being achieved and within the authority of the regional board.

* Water Quality Criteria, SWRCB, Threshold concentration is the concentration above which adverse effects upon fish are detectable.

** Report on Pollution of Mokelumne River by the Penn Mine, Calaveras County, California Department of Fish and Game, June 27, 1961.

- (2) Contention: The burden, including costs, of the reports required by Monitoring Program No. 72-90 bears no reasonable relationship to the need for such report and the benefits to be obtained therefrom.

Findings: The monitoring program established by the regional board specifies that samples shall be taken monthly from Hinkley and Mine Run creeks and tested for all constituents having numerical requirements. When the creeks contain no outflow to Camanche Reservoir, the program requires sampling of a representative pool of creek water. This sampling will aid in determining the quality of mine seepage entering the Hinkley Creek and Mine Run Creek channels and will provide information upon which to base cleanup measures to prevent the transport of toxic materials into the Mokelumne River during subsequent wet periods.

The monitoring program also requires that bioassay analyses of the combined outflow from Hinkley and Mine Run creeks be performed "once each month during the winter or whenever flow exists." Such analyses will provide meaningful surveillance during the critical wet weather period and is the minimum necessary to assure protection of aquatic life in Camanche Reservoir and the Mokelumne River. The number of toxicity bioassay tests required by the monitoring program is variable. However, under normal circumstances, the cost of the monitoring program would not exceed \$3,000 per year. The Department of Fish and Game has established the fishery value in this area which the monitoring program is designed to protect at approximately \$400,000. Therefore, the burden on the discharger for the cost of the monitoring

program is reasonable in relationship to the need for reports and the benefits obtained from them.

The monitoring program for the New Penn Mines, Incorporated, is designated as No. 72-57 in Provision B.2 of Order No. 72-57 but the actual program number is indicated as 72-90. Apparently, a clerical error has been made that should be rectified by the executive officer.

- (3) Contention: Monitoring requirements set forth in "Provisions" and Monitoring Program No. 72-90 are confiscatory in nature violating the V and XIV Amendments to the Constitution of the United States, and Section 14 of Article 1 of the Constitution of the State of California, and beyond the authority of the regional board.

Findings: The order adopted by the regional board regulates waste discharge as provided by Division 7 of the California Water Code where the discharge could affect the waters of the State. This authority is within the police power of the State and does not constitute a taking of property without compensation. The waste discharger is required to take action to meet the requirements after receiving notice of their adoption and must thereafter use the property or treat the waste in a manner which will not result in violation of the requirements.

The mere fact that some hardship is experienced is not material, since every exercise of that police power is likely to affect adversely the property interests of somebody. It is implicit in the theory of the police power that an individual

cannot complain of incidental injury, if the power is exercised for proper purposes of public health, safety, morals and general welfare and if there is no unreasonable application in the particular case (Smith v. County of Santa Barbara, 243 Cal. App.2d 126 at 130).

There is evidence in the record to support a finding that the waste discharge does affect beneficial uses downstream and therefore the adoption of waste discharge requirements is a reasonable application of the law for protection of the public welfare in the use of state waters.

- (4) Contention: Order No. 72-57 was adopted by the regional board under authority of laws which are ex post facto as to plaintiff and its lands in violation of Article 1, Sections 9 and 10, of the Constitution of the United States, and Section 16 of Article 1 of the Constitution of the State of California.

Findings: An ex post facto law is one which is passed after the occurrence of a fact or a commission of an act, which retrospectively changes the legal consequences or relations of fact or deed (Black's Law Dictionary, 4th ed., p. 662). The waste discharge requirements adopted by the regional board in Order No. 72-57 do not change any legal relationship which occurred prior to the date of adoption. They are prospective in nature only, and require the discharger to act in the future to prevent the waste from damaging beneficial uses of the waters of the State affected by the discharge. Enforcement of these requirements would occur only for failure to take necessary remedial action and would not have any relationship with prior

activities or the previous history of the mining operation on the waste discharger's property. Therefore, the regional board order does not violate the Constitution of the United States or the State of California.

C. The State Board, having considered all contentions of the petitioner and the record before the regional board, concludes as follows:

1. The waste discharge requirements are reasonable and necessary for protection of beneficial uses of waters of the State and within the authority of the regional board.

2. The monitoring program is reasonable and necessary to identify existing and potential pollutional effects of the waste discharge and to assure compliance with requirements established for protection of beneficial uses of waters of the State. The burden borne by the discharger for monitoring the effects of the waste discharge is reasonable considering the benefits to be obtained by the monitoring program.

3. The adopted requirements and monitoring program were not transmitted to the owners immediately after adoption and therefore the regional board should appropriately modify the time schedule to account for this delay.

IT IS HEREBY ORDERED that the California Regional Water Quality Control Board, Central Valley Region, shall revise Order No. 72-57 in conformity with the conclusions of this order.

Adopted as the order of the State Water Resources
Control Board at a meeting duly called and held at
Sacramento, California.

Dated: July 20, 1972

W W Adams

W. W. Adams, Chairman

E. F. Dibble

E. F. Dibble, Vice Chairman

Ronald B. Robie

Ronald B. Robie, Member

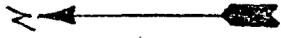
Roy E. Dodson

Roy E. Dodson, Member

Mrs. Carl Auer

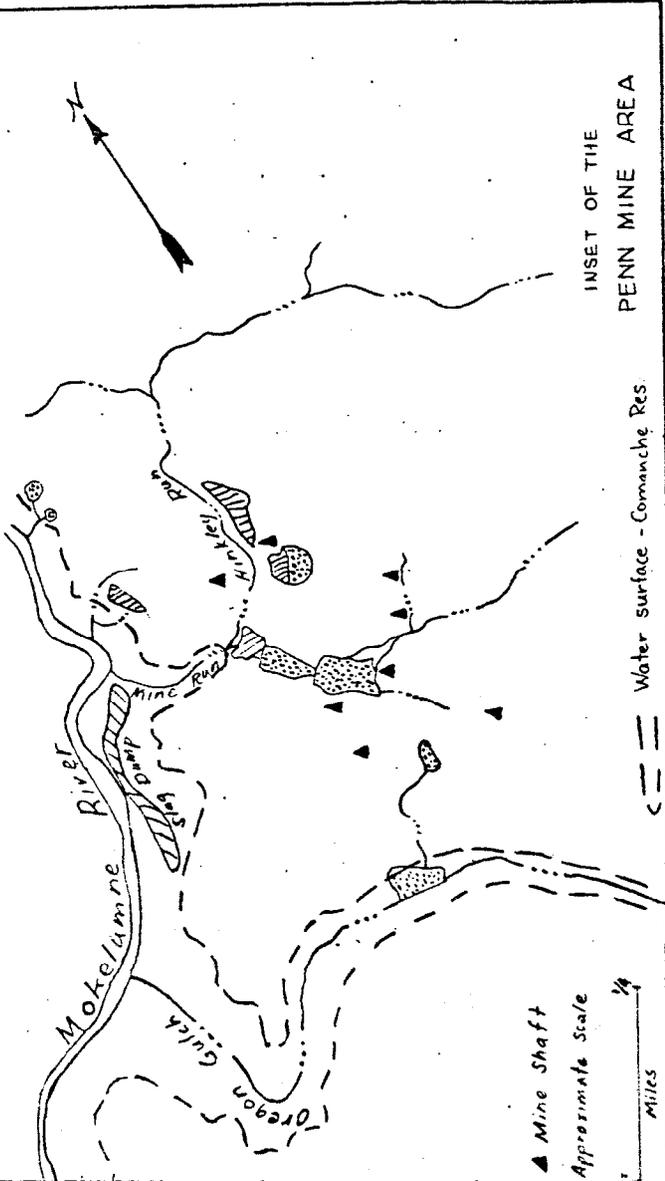
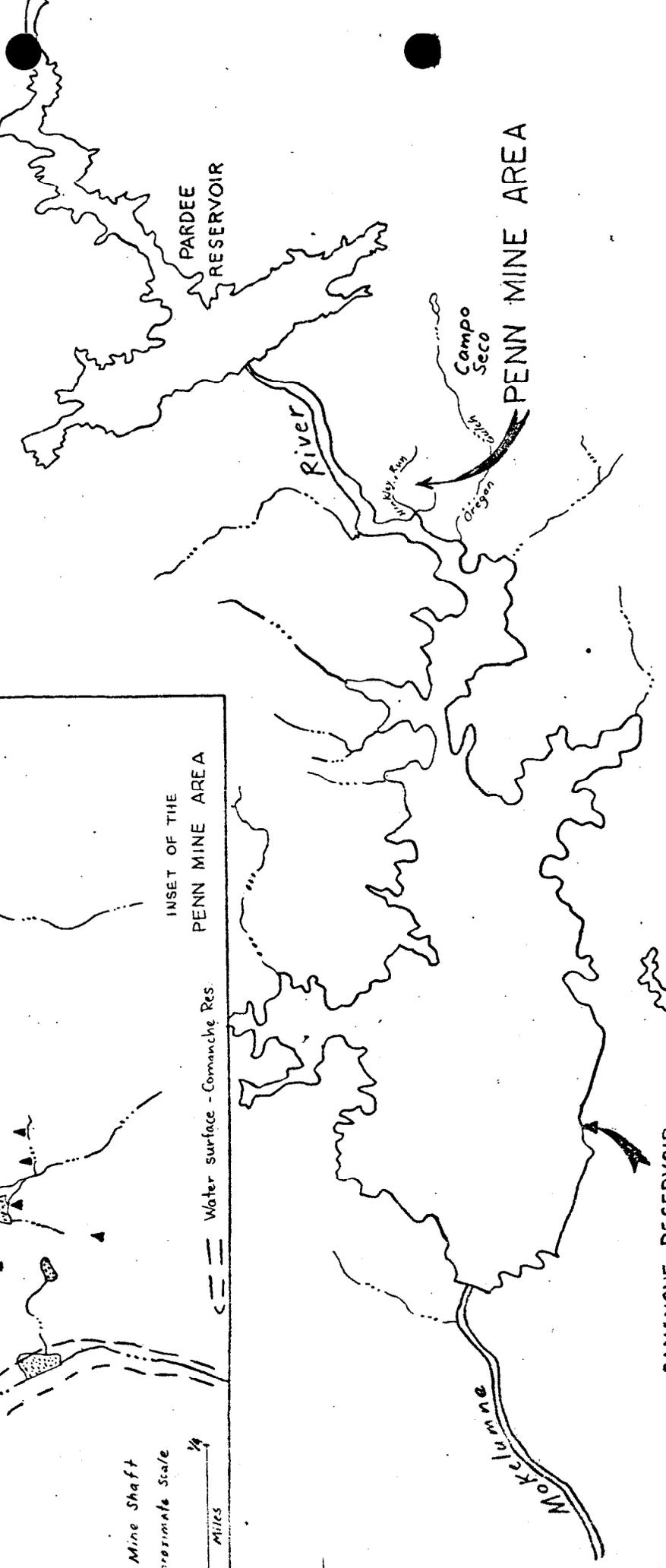
Mrs. Carl H. (Jean) Auer, Member

FIGURE 1



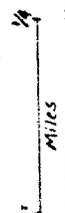
Legend

- Mine Tailings
- Ponded Mine Wastes
- Intermittent Stream



▲ Mine Shaft

Approximate Scale



Water surface - Comanche Res.

INSET OF THE
PENN MINE AREA

CAMANCHE RESERVOIR